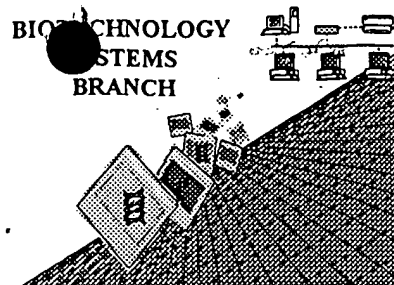


RAW SEQUENCE LISTING ERROR REPORT



The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number: 09/807,757
Source: PCT09
Date Processed by STIC: 5-1-01

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.

PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:

- 1) INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,
- 2) TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY

FOR CRF SUBMISSION QUESTIONS, PLEASE CONTACT MARK SPENCER, 703-308-4212.

FOR SEQUENCE RULES INTERPRETATION, PLEASE CONTACT ROBERT WAX, 703-308-4216.

PATENTIN 2.1 e-mail help: patin21help@uspto.gov or phone 703-306-4119 (R. Wax)

PATENTIN 3.0 e-mail help: patin3help@uspto.gov or phone 703-306-4119 (R. Wax)

TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE CHECKER VERSION 3.0 PROGRAM, ACCESSIBLE THROUGH THE U.S. PATENT AND TRADEMARK OFFICE WEBSITE. SEE BELOW:

Checker Version 3.0

The Checker Version 3.0 application is a state-of-the-art Windows based software program employing a logical and intuitive user-interface to check whether a sequence listing is in compliance with format and content rules. Checker Version 3.0 works for sequence listings generated for the original version of 37 CFR §§1.821 - 1.825 effective October 1, 1990 (old rules) and the revised version (new rules) effective July 1, 1998 as well as World Intellectual Property Organization (WIPO) Standard ST.25.

Checker Version 3.0 replaces the previous DOS-based version of Checker, and is Y2K-compliant. Checker allows public users to check sequence listings in Computer Readable form (CRF) before submitting them to the United States Patent and Trademark Office (USPTO).

Use of Checker prior to filing the sequence listing is expected to result in fewer errored sequence listings, thus saving time and money.

Checker Version 3.0 can be down loaded from the USPTO website at the following address:

<http://www.uspto.gov/web/offices/pac/checker>

Raw Sequence Listing Error Summary

ERROR DETECTED SUGGESTED CORRECTION

SERIAL NUMBER: 09/807, 757

ATTN: NEW RULES CASES: PLEASE DISREGARD ENGLISH "ALPHA" HEADERS, WHICH WERE INSERTED BY PTO SOFTWARE

- 1 Wrapped Nucleics The number/text at the end of each line "wrapped" down to the next line.
This may occur if your file was retrieved in a word processor after creating it.
Please adjust your right margin to .3, as this will prevent "wrapping".
- 2 Wrapped Aminos The amino acid number/text at the end of each line "wrapped" down to the next line.
This may occur if your file was retrieved in a word processor after creating it.
Please adjust your right margin to .3, as this will prevent "wrapping".
- 3 Incorrect Line Length The rules require that a line not exceed 72 characters in length. This includes spaces.
- 4 Misaligned Amino Acid Numbering The numbering under each 5th amino acid is misaligned. This may be caused by the use of tabs between the numbering. It is recommended to delete any tabs and use spacing between the numbers.
- 5 Non-ASCII This file was not saved in ASCII (DOS) text, as required by the Sequence Rules.
Please ensure your subsequent submission is saved in ASCII text so that it can be processed.
- 6 Variable Length Sequence(s) contain n's or Xaa's which represented more than one residue.
As per the rules, each n or Xaa can only represent a single residue.
Please present the maximum number of each residue having variable length and indicate in the (ix) feature section that some may be missing.
- 7 PatentIn ver. 2.0 "bug" A "bug" in PatentIn version 2.0 has caused the <220>-<223> section to be missing from amino acid sequence(s) . Normally, PatentIn would automatically generate this section from the previously coded nucleic acid sequence. Please manually copy the relevant <220>-<223> section to the subsequent amino acid sequence. This applies primarily to the mandatory <220>-<223> sections for Artificial or Unknown sequences.
- 8 Skipped Sequences (OLD RULES) Sequence(s) missing. If intentional, please use the following format for each skipped sequence:
(2) INFORMATION FOR SEQ ID NO:X:
(i) SEQUENCE CHARACTERISTICS:(Do not insert any headings under "SEQUENCE CHARACTERISTICS")
(xi) SEQUENCE DESCRIPTION:SEQ ID NO:X:
This sequence is intentionally skipped

Please also adjust the "(iii) NUMBER OF SEQUENCES:" response to include the skipped sequence(s).
- 9 Skipped Sequences (NEW RULES) Sequence(s) missing. If intentional, please use the following format for each skipped sequence.
<210> sequence id number
<400> sequence id number
000
- 10 Use of n's or Xaa's (NEW RULES) Use of n's and/or Xaa's have been detected in the Sequence Listing.
Use of <220> to <223> is MANDATORY if n's or Xaa's are present.
In <220> to <223> section, please explain location of n or Xaa, and which residue n or Xaa represents.
- 11 Use of "Artificial" (NEW RULES) Use of "Artificial" only as "<213> Organism" response is incomplete, per 1.823(b) of New Sequence Rules.
Valid response is Artificial Sequence.
- 12 Use of <220>Feature (NEW RULES) Sequence(s) are missing the <220>Feature and associated headings.
Use of <220> to <223> is MANDATORY if <213>ORGANISM is "Artificial Sequence" or "Unknown"
Please explain source of genetic material in <220> to <223> section.
(See "Federal Register," 6/01/98, Vol. 63, No. 104, pp. 29631-32) (Sec. 1.823 of new Rules)
- 13 PatentIn ver. 2.0 "bug" Please do not use "Copy to Disk" function of PatentIn version 2.0. This causes a corrupted file, resulting in missing mandatory numeric identifiers and responses (as indicated on raw sequence listing).
Instead, please use "File Manager" or any other means to copy file to floppy disk.

PCT

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/807,757

DATE: 05/01/2001

TIME: 11:30:08

Input Set : A:\Sequence Listing (JB0930.WPD;1).txt

Output Set: N:\CRF3\05012001\I807757.raw

Does Not Comply
Corrected Diskette Needed

See pp. 3, 4

4 <110> APPLICANT: OWENS, Gary K.
 5 MACK, Christopher
 6 BLANK, Randall
 8 <120> TITLE OF INVENTION: Compositions and Methods for Modulating
 9 Expression within Smooth Muscle Cells
 12 <130> FILE REFERENCE: 9426-016-228
 C--> 14 <140> CURRENT APPLICATION NUMBER: US/09/807,757
 C--> 14 <141> CURRENT FILING DATE: 2001-04-17
 14 <150> PRIOR APPLICATION NUMBER: US60/105,330
 15 <151> PRIOR FILING DATE: 1998-10-23
 17 <160> NUMBER OF SEQ ID NOS: 18
 19 <170> SOFTWARE: FastSEQ for Windows Version 4.0

ERRORED SEQUENCES

21 <210> SEQ ID NO: 1
 22 <211> LENGTH: 5342
 23 <212> TYPE: DNA
 24 <213> ORGANISM: Rodent
 26 <400> SEQUENCE: 1
 27 agtactgggt tcaagggaaa gatcctgtct aaaagatcct atggagacaa tcgagggaca 60
 28 taaacactat caccocctgg ctttcgcaga cctatatatg cacaagcatg tgccottgta 120
 29 catgtaaatg tgcacacaca gaggcattgca cacctgacat cataccaaag caaagatgaa 180
 30 atgaagtaga aatgtcaact ctacatattt tgggtggttaa tagttgcatg tgtccagtgg 240
 31 ctactgcacg aggagtgtct gattctgggc attcctgtca ctaccagagc taactcacca 300
 32 ataccatgct aagtcattctc tggaccagag ccagtgagg actaaaatgg tctccagttc 360
 33 tcaagggctg aactataaac catcactaaa tcaattgctg gagacattct gtgatgtctg 420
 34 tggagcaata cagctggaga tgactcttca gtgtgtgctt atagcttgga tttattttct 480
 35 agtttccctg aactgcaacc aagtaccag atgtacgctc ccaatcagc ccatagctcc 540
 36 ttgcatccat ggctgccaac cctggcagtt atctaagcgc tcagtggagc tctgtaaaact 600
 37 tgtacgcact catccagtgg gcctttctct cccagaagag actggagctg gatataaaat 660
 38 ctcaaaactct ggctggagag atggctcagt gtttaagagc actgactgct cttccagagt 720
 39 tcaaatccca gcaaccacat ggtggttac agccatctgt aatgataatt gataccctct 780
 40 tctggtgtat ctgaagacag ttacactgtg ctcataataa ataaataaat ataagtaaat 840
 41 aaataaataa atatttttaa aaacctcaa actcacacat tgtgaccatt aattacttgc 900
 42 tcaaaaattg agcaaatcct ccttggttac ttcagattgc ttttgaaat tcttaaaata 960
 43 aataaaacaa ctgaaactta ctttcttctt cttgtcataa tattctgatt attgacaaat 1020
 44 acaaccagta taaacaaaaa agttataaga ttatcaaagc tcttttcttg gtttttaaag 1080
 45 gaattagcat cttgaaatga ccaagacaac actccaacac tcatgaaaca aaacatcagc 1140
 46 acagatatcc atgccaggtt ctaaagtaaa aaataaaaaca agaaacaaaa acaaaacaaa 1200
 47 aaaaaacaaa aaaacaaaga aaacatgga actttacttt atatgatgcc tatgataaaa 1260
 48 ccggttgcat taatcataaa tgtcccatcc tgccctacaa aatgcagctc ctgtatttga 1320
 49 gtgatcagac aatgtatttc tagttggtga aaccagatac agagtagaaa actcttaagc 1380
 50 aacacaaaga agccccatta ttatttagca accattacac tcttctaaga gtcaacgggtg 1440
 51 taattctcaa agacagctat gcgtgcctgg gtgcagggtg acaccattaa tcaagagcat 1500
 52 gagacatggt agcgtgagta gacagctgct ggcattcacc ctgggcttcc cctgacatgc 1560

RAW SEQUENCE LISTING

DATE: 05/01/2001

PATENT APPLICATION: US/09/807,757

TIME: 11:30:08

Input Set : A:\Sequence Listing (JB0930.WPD;1).txt

Output Set: N:\CRF3\05012001\I807757.raw

53	caacagttca	gagccactta	tggatccgtc	taaaatatct	ccatcatgaa	ttgaatcaga	1620
54	accttggcctt	gcaggaggga	agtagagaaa	ggtaaagtcg	ttgactgtcc	attgaagcca	1680
55	aagagctgat	gatgtctttg	aagaatggca	gggtcacttg	atcgctcttt	ctgtccagtg	1740
56	ggctcataaa	cacggaggag	gatgagcagg	cttcatttca	acatttcaaa	cttcttttac	1800
57	aatttttttt	atgacggggc	aatgggtcct	ctctgtggcc	aaaagacggg	ccttaagcat	1860
58	gatatacagg	gtcagcgata	aaccaacaac	atgcacgtgg	actgtacct	ggggttaacg	1920
59	cagttacagt	gattctgact	tctaagttcc	tcttagggta	acataggctg	gtgaatcctg	1980
60	attacatact	tccatagtga	atacatacag	acttcattga	tactacacac	agactccaga	2040
61	ctacatacaa	tgtggcttcc	ataaaatgat	cactcctctg	cagattcgca	ggtgacccaa	2100
62	gcactctttg	ttataggcta	ccttttgcaa	cagtgttgcc	ttaaagtccc	agctagtcag	2160
63	agacaggccc	ttctctcatc	caagccctta	gctaattggac	ccaaaggcta	gcctgacagg	2220
64	aagagctggc	atcttctgag	gaatgtgcaa	accatgcctg	cgtctgtctc	atgacactag	2280
65	cccagtgctc	gggcatttga	gcagttgttc	tgagggtcca	ggatgtttat	ccccataagc	2340
66	agctgaactg	cctcctgttt	cgagagcaga	gcagaggaat	gcagtggaa	agacccaggc	2400
67	ctctggccac	ccagattaga	gagttttgtg	ctgaggtccc	tatatggttg	tgttagagt	2460
68	aacggccagc	ttcagcctgt	ctttgtcctc	tgtttgggaa	gcgagtggga	ggggatcaga	2520
69	ccagggggct	ataaaccct	tcagcattca	gcctccccag	acaccacca	cccagagtcg	2580
70	agaagcccag	ccagtcgcca	tcagggtta	gatgtgactt	agagttttcc	caggcttttt	2640
71	aatcatccag	tggaaaccga	cgttgtctgt	agtaactctga	atgactca	tgtttggaat	2700
72	ttgggaataa	agatttatgc	tgtaaaatg	attgtagctc	cttagcttgc	atgatttcgt	2760
73	atctaaacgg	gactaaaaat	gaatcgtgg	ttactggcaa	aggagatgga	gaggaaatta	2820
74	aagtttgctc	atgcgtggca	tctgtgaaat	ctgtttacac	taaaccaact	gctcggatcc	2880
75	cgcagcctac	tataggggag	aagtccagcc	atctatggta	aattatacat	ttgtttctac	2940
76	ttaggtgttg	gacacttg	gatttgtcta	tggttcagac	ttagtgtgag	gactttccat	3000
77	ctgaccgact	acagccgggt	taactggaac	tggatgtcag	gagtgaactg	gcgcgggtgc	3060
78	ctgcgctctg	gttttggtg	agtggactgc	gttgctctg	ggtttccggg	gctotaacag	3120
79	tagacatgta	tatcttgtgc	ccttacgatt	caaaccctatg	tcattgggtca	tttgagcaa	3180
80	agcatagctc	ctctactctc	tgcaaaagaa	tgaggaagt	tctcattcgg	gaaggatctg	3240
81	attgcgtttc	tctgctctca	gtgtccctct	ggcccttag	gcagaatctc	tgtgggagcc	3300
82	accccaactca	ggacttggt	acttctgcag	ggaaacggag	ttttctcgat	aagattttcc	3360
83	tccctgtttg	tgattctga	ctaaatatgg	tttgcgtttt	gagactcaca	aactggggaa	3420
84	ggttactgtc	ctttcctcct	ccctccctc	ccctcttaca	attcattttt	ggcacaagat	3480
85	gagctccact	gtgctgcacc	aaactccccg	gcctcgggtg	cagttccaaa	agcggacgct	3540
86	ggagcccagt	gtgttttacc	taattaggaa	atgctccctg	cttcaaaactg	aagctgctcc	3600
87	ttcagggttag	ataagagttg	caaaccacag	cggcagtttc	ctctggaaac	acaccgacgt	3660
88	cttctctagt	gacgacgctc	ctttcaaagc	ttattaagac	atattttctg	gatatttttg	3720
89	atgaagtaga	aatacgtctt	tactgaatta	gtgattttta	cttgcaattt	aaaaaaaaac	3780
90	taggaagcct	atttctctga	atatactaag	gcacaacctt	aagtcactct	gcccacagat	3840
91	ttatgtgggt	tatccttccc	cgttttcaaa	gggcatccta	attccgagtg	gtttatctca	3900
92	tttgagcccc	ggatgctatg	ttttggacag	caggcttcc	gtagactctc	tgctggtcct	3960
93	ttgctgctgg	ctgcctctgc	caatcacctg	gctgctgtgc	ctctctgtgc	tttgagactg	4020
94	tcttctgagt	ctttatcgtc	cactggaaag	gaagctaaat	ataaattcag	tgtctgaaag	4080
95	aagaggcaga	gtagagagag	gaaagagcaa	accaaccaag	atcccathtt	tccgttcttg	4140
96	tgaggggaac	ccaggcattg	aagattttac	tctgattttg	gaggcagggt	ttgaaaggaa	4200
97	accaaaatca	caaacagaat	ctctgggtaa	agacaatagt	cacatggtga	gacgcacaag	4260
98	caatgcttgt	acaatgccct	tgatgtcccc	cgaagctgtc	gaaaacacaa	gcttaaatgt	4320
99	caattactta	aaatgctatt	ttaagcccaa	aagagtatgt	gctcagttag	tcaaggttag	4380
100	aagaaatacc	agaactcagg	ggaggaaaaa	atatattataa	aacctgatac	ttgccacttc	4440
101	caaagaacco	cagtaaatat	tttgagagaga	ataagtaagc	tttgggggtg	agggagtggg	4500

RAW SEQUENCE LISTING

DATE: 05/01/2001

PATENT APPLICATION: US/09/807,757

TIME: 11:30:08

Input Set : A:\Sequence Listing (JB0930.WPD;1).txt

Output Set: N:\CRF3\05012001\I807757.raw

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102 gggcaattca ctttttatta cgggtcatatt aagttttctt ctgtaactta tcagtcttaa 4560
103 gtaagaatag ctattatcat cctgttgggt ttccagctta gcagtgattt tgattaatga 4620
104 ggaaatggtg taaatcctaa aattgcaaac tcccccatca aaaattttca atccaatatt 4680
105 ttttactaga gtaggacttg gtagccttct aacttggtgat cctcctgcct cagcttccca 4740
106 agtggttaga tcacaggtct acatcaccac gccagctctt gattcatgtc taatgccaca 4800
107 ccagcaccca agtcttcaga gacaaaagat ttttctttta aacatttaat atgagcaaac 4860
108 attttaacat tctcatatgc tgcccattat tccaaaatct accttttttg gggaaaatat 4920
109 attttaccaa aaaaaaaagt gacttttggt tgatatagat aacaaacctt ggtttgatat 4980
110 agataacaaa cttttctaga tagttcttta acatgtggta tctactattcc ctatagacct 5040
111 gtgttctcca ctcaggacct ctcactgtgt ctctgtggcc tgttcacaca ctaatgctct 5100
112 gccctgcttg agagtggtaa aagagcctgt gagctcctgc tctttgtgct gagggtctgt 5160
113 ggtgctaacc tggaagtcag ggtttcagct catcaaaggc cttacagtct ggtgaaagca 5220
114 tttcaagata aagagtgtta gttgagatct ggggagagcg tccagctaaa ataacacaac 5280
115 agggccaaga accctggttg tggttgggag tgaccgtagg ctccggccaa acgcaacctc 5340
E--> 116 ga
E--> 117 2
118 <211> LENGTH: 326
119 <212> TYPE: DNA
120 <213> ORGANISM: Rodent
W--> 122 <210> SEQ ID NO:
E--> 122 <400> SEQUENCE: 2
123 ggaaacggag ttttctcgat aagattttcc tccccttttg tgattcatga ctaaatatgg 60
124 tttgcgtttt gagactcaca aactggggaa ggttactgtc ctttctcct cctccccctc 120
125 cctctttaca attcattttt ggcacaagat gagctccact gtgctgcacc aaactccccg 180
126 gcctcgggtg cagttccaaa agcggacgct ggagcccagt gtgttttacc taattaggaa 240
127 atgctccctg cttcaaactg aagctgctcc ttcagggttag ataagagttg caaaccacag 300
128 cggcagtttc ctctggaaac acaccg 326
E--> 130 <210> SEQ ID NO: 3

```

Enter "hard
return" where
arrow indicate
to move <210>
to beginning of
next line.
This should
correct errors
shown.

<210> 11
 <211> 10
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Oligonucleotide

<400> 11
 aattgtttaa

10

<210> 12
 <211> 10
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Oligonucleotide

<400> 12
 ccctatatca

10

<210> 13
 <211> 10
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Oligonucleotide

<400> 13
 aataaataaa

<210> 14
 <211> 20
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Oligonucleotide

<400> 14
 ttgctccttg tttgggaagc

20

<210> 15
 <211> 20
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Oligonucleotide

<400> 15
 gaggtcccta tatggttg

20

What is the source of
 the genetic material in
 the artificial sequences?

Oligonucleotide is not
 specific enough. See
 # 12 on the Error Summary
 Sheet.

Note: This error also occurs
 in sequences 16, 17, and 18.

VERIFICATION SUMMARY

DATE: 05/01/2001

PATENT APPLICATION: US/09/807,757

TIME: 11:30:09

Input Set : A:\Sequence Listing (JB0930.WPD;1).txt

Output Set: N:\CRF3\05012001\I807757.raw

L:14 M:270 C: Current Application Number differs, Replaced Current Application No
L:14 M:271 C: Current Filing Date differs, Replaced Current Filing Date
L:116 M:254 E: No. of Bases conflict, LENGTH:Input:0 Counted:5344 SEQ:1
L:116 M:320 E: (1) Wrong Nucleic Acid Designator, NUMBER OF INVALID KEYS:9
M:254 Repeated in SeqNo=1
L:117 M:252 E: No. of Seq. differs, <211>LENGTH:Input:5342 Found:5344 SEQ:1
L:122 M:282 W: Numeric Field Identifier Missing, <210> is required.
L:122 M:212 E: (34) Invalid or duplicate Sequence ID Number, SEQUENCE ID NOS:1 differs:2
L:130 M:214 E: (33) Seq.# missing, SEQ ID NO:2